

Unit 1.4 Amateur Radio Signals: Modulation

When you get your Technician license, chances are FM is the type of modulation that you'll use first. Frequency modulation, or FM, is the type of modulation most commonly used for VHF and UHF voice repeaters. (T8A04) FM is also the type of modulation most commonly used for VHF packet radio transmissions. (T8A02)

Single sideband, or SSB, is the type of voice modulation most often used for long-distance or weak signal contacts on the VHF and UHF bands. (T8A03) Single sideband is a form of amplitude modulation. (T8A01) A single-sideband signal may be upper or lower sideband. Upper sideband is normally used for 10 meter HF, VHF and UHF single-sideband communications. (T8A06)

The primary advantage of single sideband over FM for voice transmissions is that SSB signals have narrower bandwidth. (T8A07) The approximate bandwidth of a single sideband voice signal is 3 kHz. (T8A08) The approximate bandwidth of a VHF repeater FM phone signal is between 10 and 15 kHz. (T8A09)

Morse code, or CW, is the type of emission that has the narrowest bandwidth. (T8A05) The approximate maximum bandwidth required to transmit a CW signal is 150 Hz. (T8A11) International Morse is the code used when sending CW in the amateur bands. (T8D09)

All of these choices are correct when talking about instruments used to transmit CW in the amateur bands (T8D10):

- Straight Key
- Electronic Keyer
- Computer Keyboard

Some modes have very wide bandwidths. The typical bandwidth of analog fast-scan TV transmissions on the 70 cm band, for example, is about 6 MHz. (T8A10) The type of transmission indicated by the term NTSC is an analog fast scan color TV signal. (T8D04)

QUESTION POOL (14)

T8A04	T8A02	T8A03	T8A01	T8A06	T8A07	T8A08
T8A09	T8A05	T8A11	T8D09	T8D10	T8A10	T8D04